



Robert Goddard at age 10, with his parents in the backyard at Maple Hill.

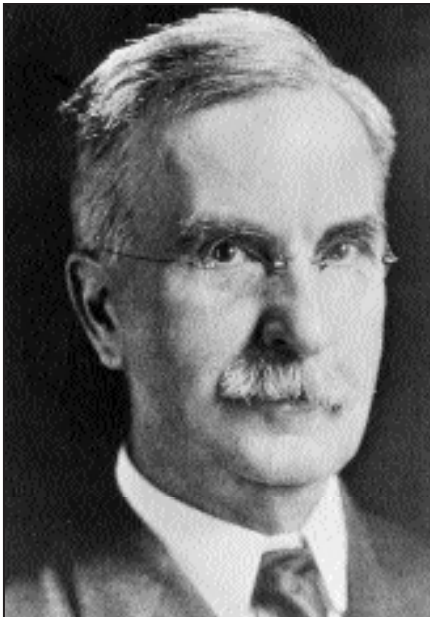
(Source: Clark University Archives)

“Gram,” Mary Pease Goddard,
Robert’s grandmother, about 1910.

(Source: Author’s Collection)



Worcester Polytechnic Institute in 1906, while Goddard was a student. The Magnetic Building is at the lower left. *(Source: WPI Archives and Special Collections)*



A. Wilmer Duff, Goddard's first patron, WPI physicist.

(Source: WPI Archives and Special Collections)



Konstantin Tsiolkovsky, late in his life as a Soviet "Hero" and the Russian "father" of modern rocketry and space flight.

(Source: Author's Collection)



Arthur Gordon Webster, Goddard's second patron, Clark University physicist.

(Source: Clark University Archives)

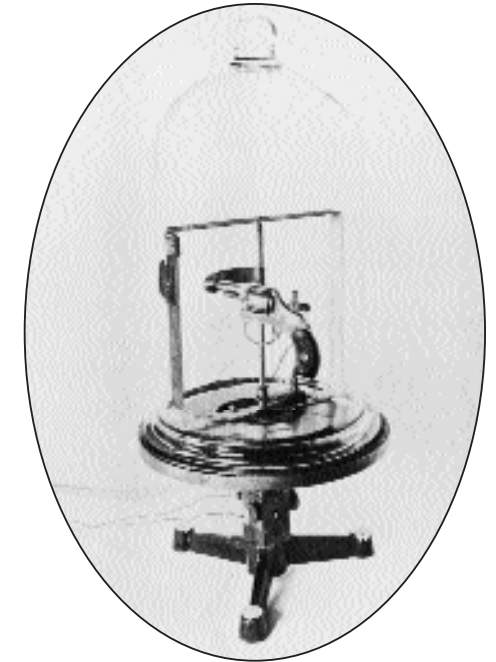


Charles T. Hawley, patent attorney, who served the Goddards from 1913 to 1957; photo from early in his career, around 1920.

(Courtesy Clark University Archives)

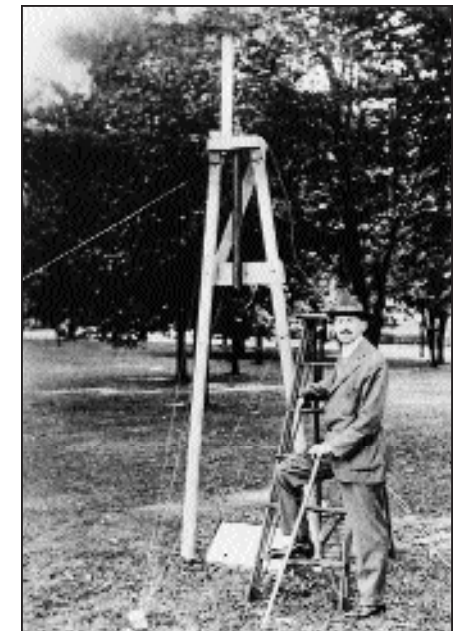
Goddard's first proof that a rocket would provide thrust in a vacuum, about 1914. The muzzle blast from a blank cartridge would cause the pistol to twirl around the spindle. This simple demonstration was popular during "Sub-Freshman Days" in the 1920s.

(Source: Clark University Archives)



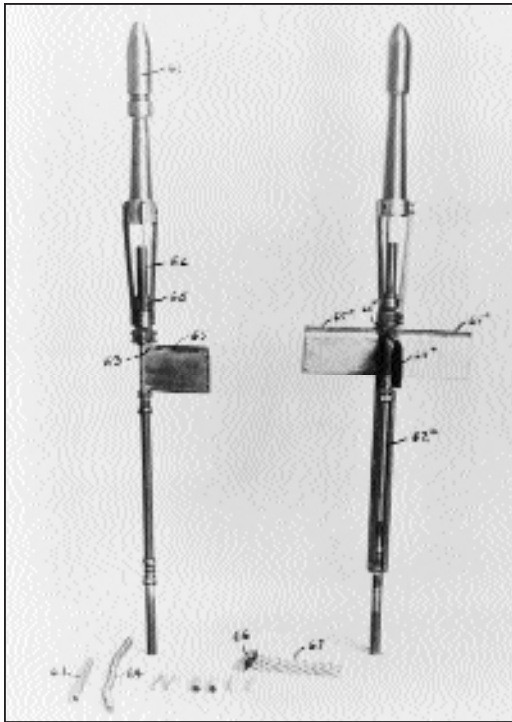
Circular tube used in proving further that a rocket would provide thrust in a vacuum, 1915.

(Source: NASA)



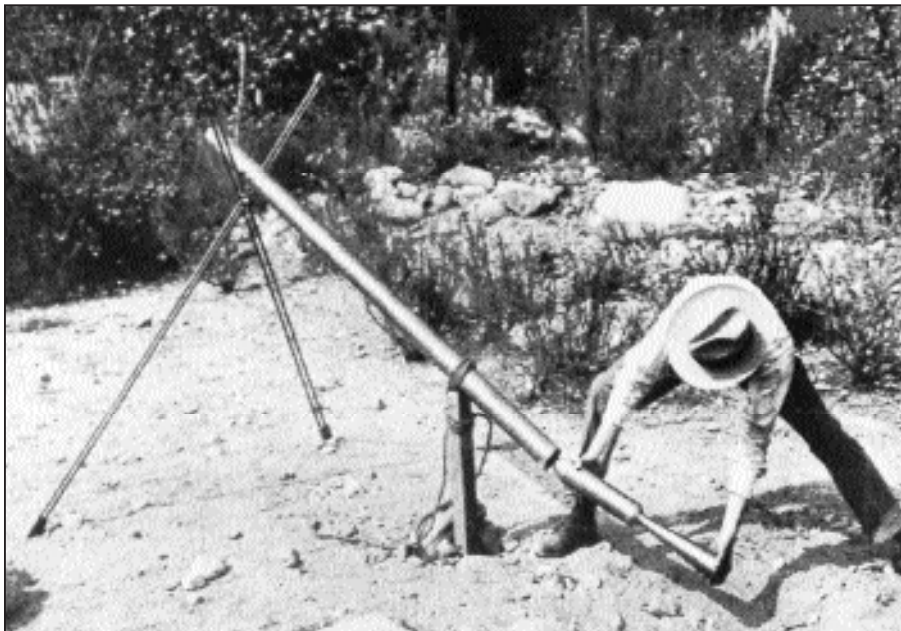
The best-dressed man on campus: Goddard poses with a rocket test stand on the Clark University campus, about 1914-16.

(Source: Clark University Archives)



One of several versions of a self-reloading, multiple-charge, solid-fuel rocket, the "machine gun firing blanks," from an illustration for a report to the Smithsonian. This, like all other versions, could not be made to work.

(Source: Clark University Archives)



Goddard loading one of his tube-launched infantry rockets, near Mt. Wilson, California, 1918.

(Source: NASA)



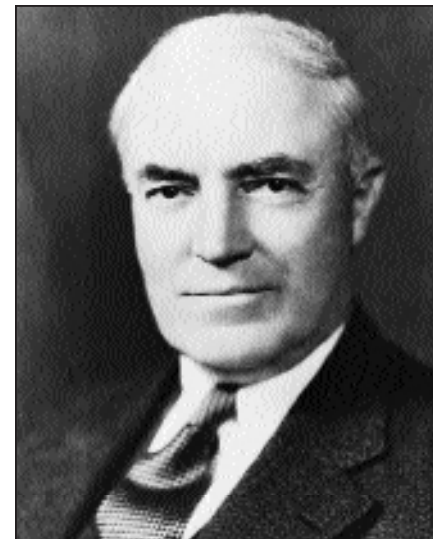
Charles G. Abbot of the Smithsonian Institution, Goddard's third patron, observing the sun with one of his many inventions, around 1920.

(Source: Smithsonian Institution Archives)



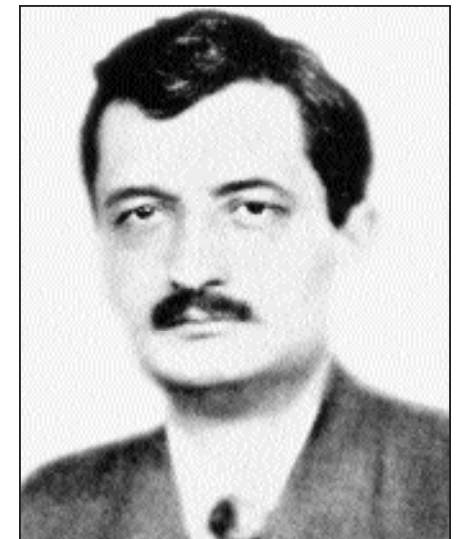
Esther Christine Kisk, age 17, as a senior in high school, 1918.

(Source: Author's Collection)



Wallace W. Atwood, president of Clark University.

(Source: Clark University Archives)



Hermann Oberth, soon after the publication of his 1923 book, which made him the German "father" of modern rocketry and space flight. (Source: Author's Collection)



Goddard in the laboratory at Clark University, late 1920s.

(Source: NASA)

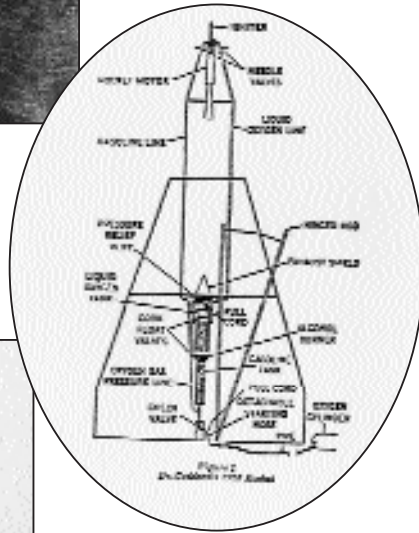


Diagram of the first liquid-fuel rocket to fly, 16 March 1926.

(Source: NASA)



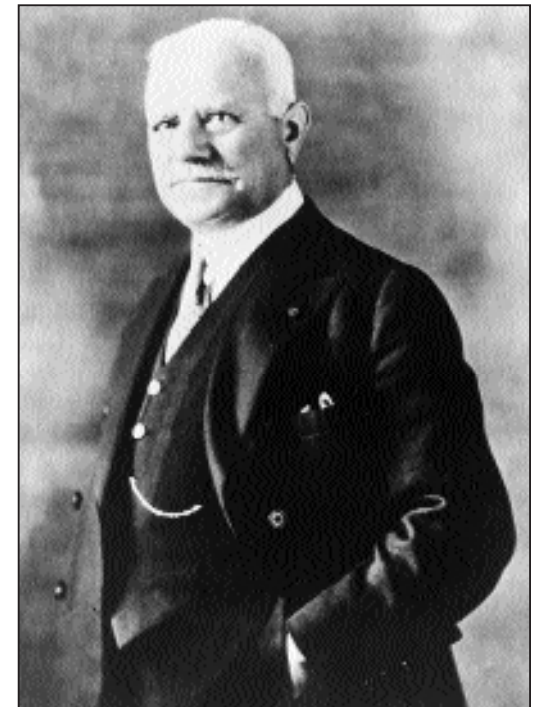
Goddard posing with the rocket in its launch frame, shortly before the first liquid-fuel rocket flight, "Aunt Effie" Ward's farm, Auburn, Massachusetts, 16 March 1926. This is the most familiar photo of Goddard ever taken, distributed by the photographer, his wife Esther, in the decades after his death.

(Source: NASA)



Goddard and crew posing for Esther's camera with the wrecked rocket after the attention-grabbing flight of 17 July 1929, just before the police, ambulances, and reporters arrived, near Auburn, Massachusetts. *Left to right:* Larry Mansur, Goddard, Henry Sachs, Al Kisk, Percy M. Roope.

(Source: Clark University Archives)



Daniel Guggenheim, about 1920. "Mr. Dan" became Goddard's benefactor, pledging \$100,000 from his own pocket on the advice of Charles Lindbergh, enabling Goddard to begin these experiments in New Mexico in 1930.

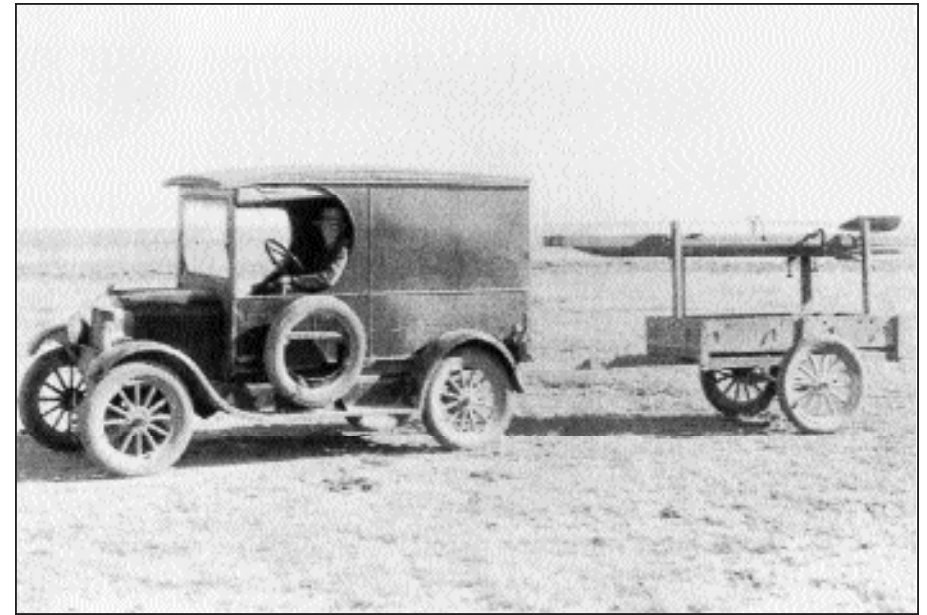
(Courtesy Clark University Archives)



Main Street, Roswell, New Mexico, 1930s. (Source: Historical Society of Southeastern New Mexico)



Rear (north) side of the house at Mescalero Ranch, 1930, shortly before the Goddards leased the place from "Miss Effie" Olds and Esther started remodeling. Among her changes was the screening of the porch. The front (south) façade of the house was, in keeping with the New Mexico Territorial Style, nearly blank. (Source: Clark University Archives)



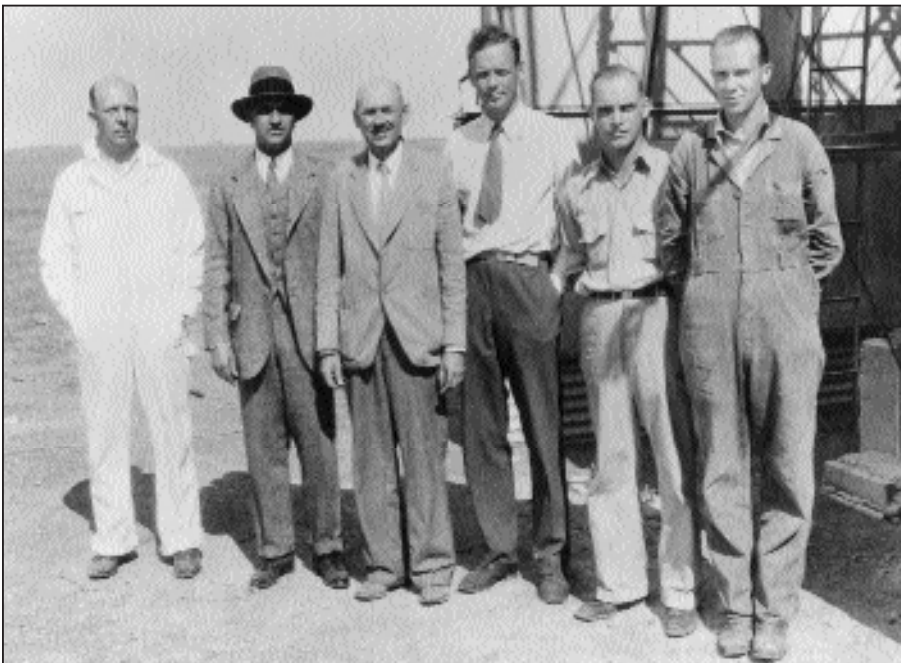
The first truck and trailer used to haul rockets from Mescalero Ranch to Eden Valley, in the years 1930-32. (Source: NASA)



Loading an early rocket into the launch tower at Eden Valley, 17 October 1931. Left to right: Larry Mansur, Al Kisk, Charles Mansur, unidentified, Goddard, Ole Ljungquist. (Source: Clark University Archives)



Maple Hill (1 Tallawanda Drive), Worcester, Goddard's birthplace and lifelong home, as it looked on his return from New Mexico, 1932. The porch was closed in during the 1960s and utilities have been upgraded, but otherwise the place looks the same now as it did following Esther's remodeling in the 1920s. (Source: Clark University Archives)



Group photo taken by Esther during the visit to Roswell by Goddard's last two patrons, Charles Lindbergh and Harry Guggenheim, 25 September 1935. Left to right: Al Kisk, Guggenheim, Goddard, Lindbergh, Ole Ljungquist, Charles Mansur.

(Source: Clark University Archives)



Goddard at his launch command post, Eden Valley, late 1930s. The telescope focused on gauges connected to pressure lines on the rocket in the launch tower. When readings were right, he could operate fire, release, or stop keys on the panel in front of him.

(Source: NASA)



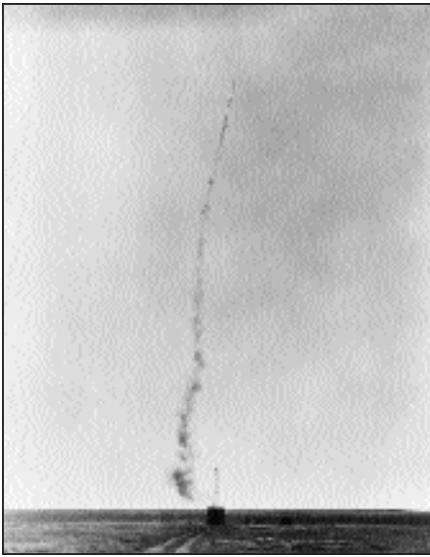
Goddard leaving the ranch house for the shop one morning in 1937. Notice the shabby clothing; one of his crew described him as "very sloppy."

(Source: Clark University Archives)



Robert and Esther Goddard at home in Roswell, 1937. Photographs of the two of them together are very rare.

(Source: Clark University Archives)



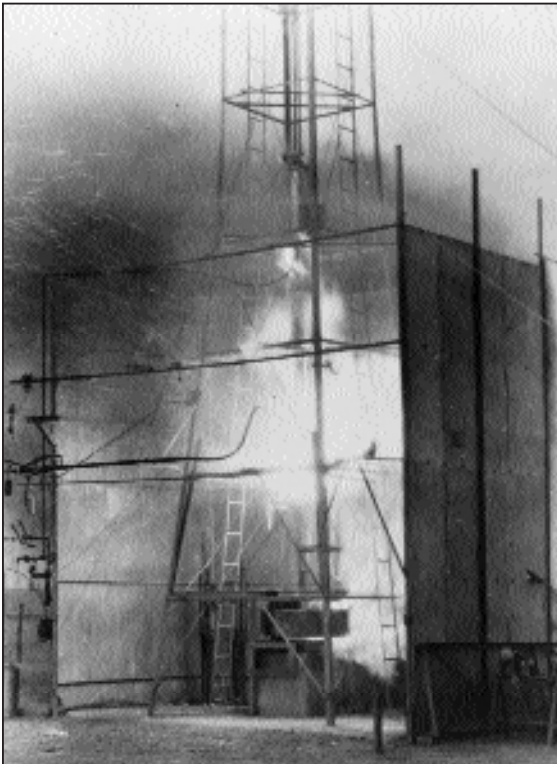
The official NAA record flight, 9 August 1938. Esther made this reverse print from her movie of the flight.

(Source: Clark University Archives)



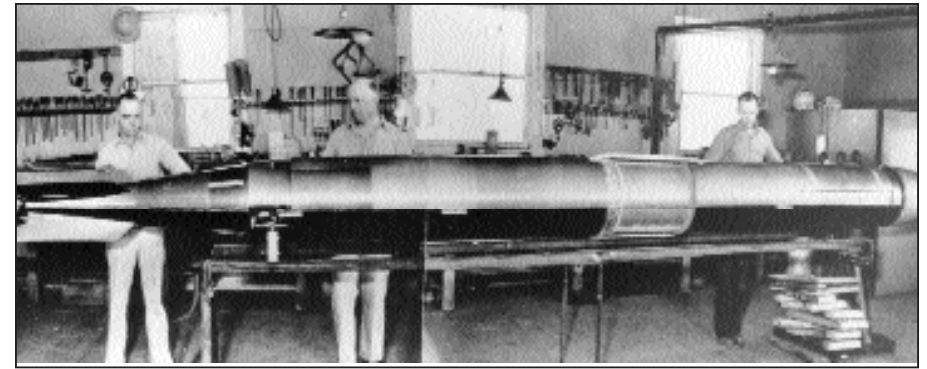
Howard and Marjorie Alden, NAA observers, checking the barograph after the record flight of 9 August 1938.

(Source: Clark University Archives)



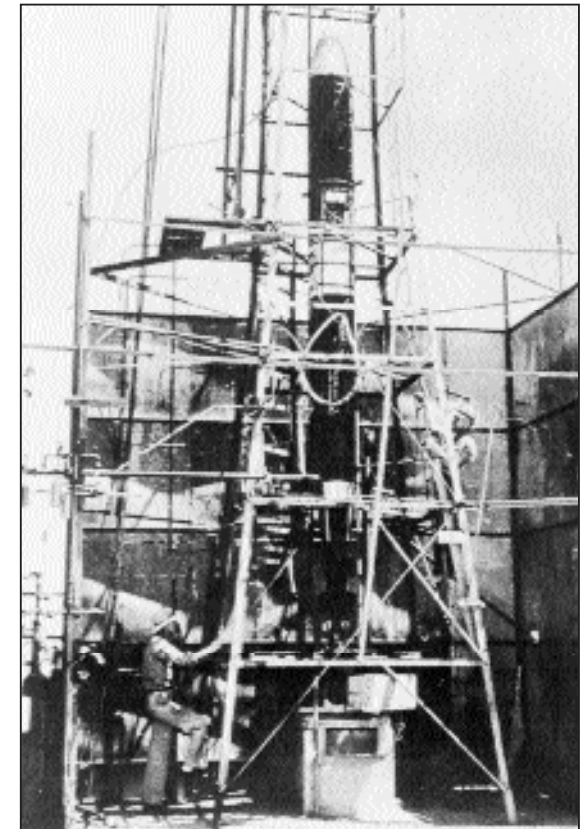
AP-series pump rocket explodes at ignition, 14 June 1939.

(Source: Clark University Archives)



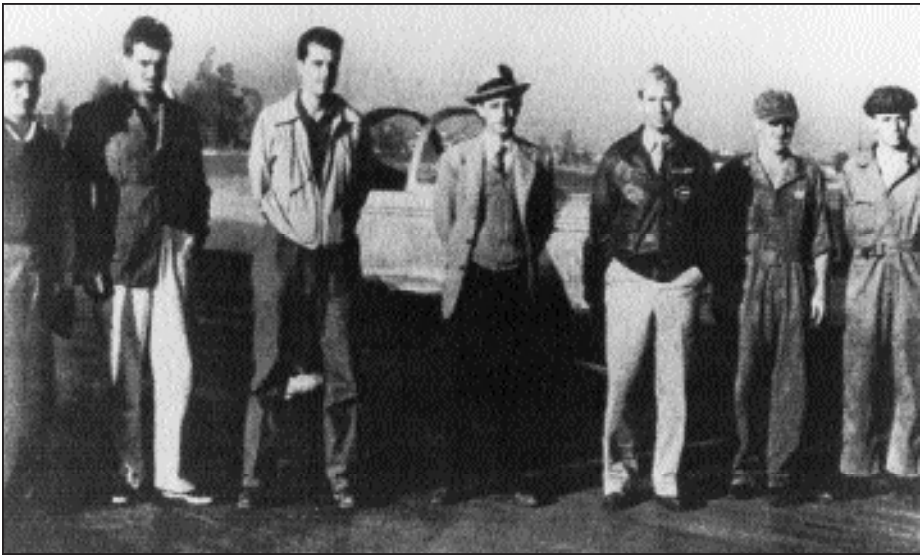
Nell at her height: A P-series pump-turbine rocket in the shop at Mescalero Ranch, 1941. After the German V-2 campaign began, Goddard gave Harry Guggenheim a copy of this photograph bearing an inscription claiming that it was "practically identical with the German V-2 rocket." The Guggenheim Foundation later distributed thousands of copies of this photo and the inscription as part of the campaign to prove that the V-2 was a theft of Goddard's work, as was use of the V-2 by the United States government. *Left to right: Ljungquist, Kisk, Charles Mansur.*

(Source: Author's Collection)



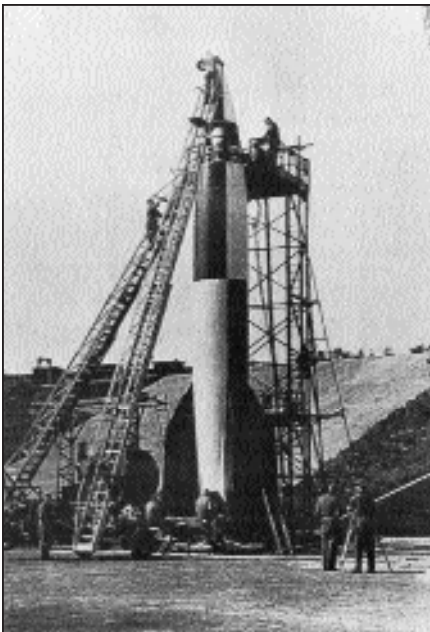
Nell P-23 in the tower, being prepared for launch, March 1940. The flight was not successful.

(Source: NASA)



Frank Malina and Homer Boushey, with Army and GALCIT technicians, just before Boushey became the first American to pilot a rocket-propelled aircraft, August 1941.

(Source: NASA)



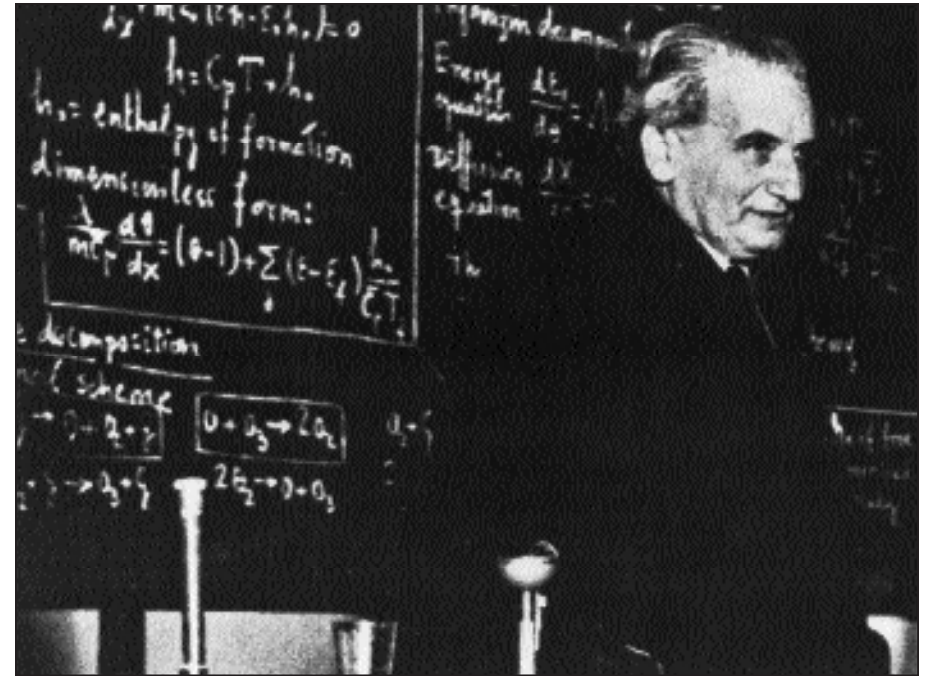
German technicians preparing an A-4 (V-2) for a flight test, 1944. Compare its size with Goddard's largest rockets, the "P" series.

(Source: NASA)



Goddard examining the combustion chamber of a captured V-2, Annapolis, April 1945. The rocketeer's physical deterioration is evident four months before his death.

(U.S. Navy photo courtesy Clark University Archives)



Theodore von Kármán, co-founder with Frank Malina of the Jet Propulsion Laboratory out of the former GALCIT.

(Source: NASA)



Wernher von Braun, Esther Goddard, and former NMMI Superintendent Gen. Hugh Milton, posing in front of the launch tower on the grounds of the Roswell Museum, during the dedication of the museum's Goddard Wing, 1959. It was the first of a series of dedications at which von Braun would declare Goddard to be his "boyhood hero."

(Source: Roswell Museum and Art Center)



Wernher von Braun (right) with his other “boyhood hero,” Hermann Oberth, in 1961.
 (Source: NASA)



Goddard Commemorative Airmail Stamp, first-day covers, 1964.
 (Source: Author's Collection)